



NR-GIS Data Store Training Exercise: Uploading and Deleting Records

GOAL: To become familiar with the NR-GIS Metadata Database and Data Store (Data Store) application, and practice uploading and deleting records.

The Natural Resource and GIS Metadata and Data Store application (NR-GIS Data Store) manages and shares natural resource and GIS metadata and data generated by the Natural Resource and Servicewide GIS Programs of the National Park Service. To facilitate data dissemination to the public and throughout the National Park Service, the NR-GIS Data Store application posts information to the NPS GIS Clearinghouse located in NPSFocus. The NR-GIS Data Store is part of the NPS Metadata System and provides two functions: the NR-GIS Metadata Database and the NR-GIS Data Server. The NR-GIS Metadata Database is a repository of and search engine for metadata describing natural resource and GIS data. The NR-GIS Data Server hosts natural resource and GIS data (documented by the metadata in the NR-GIS Metadata Database) for download.

REQUIRED MATERIALS

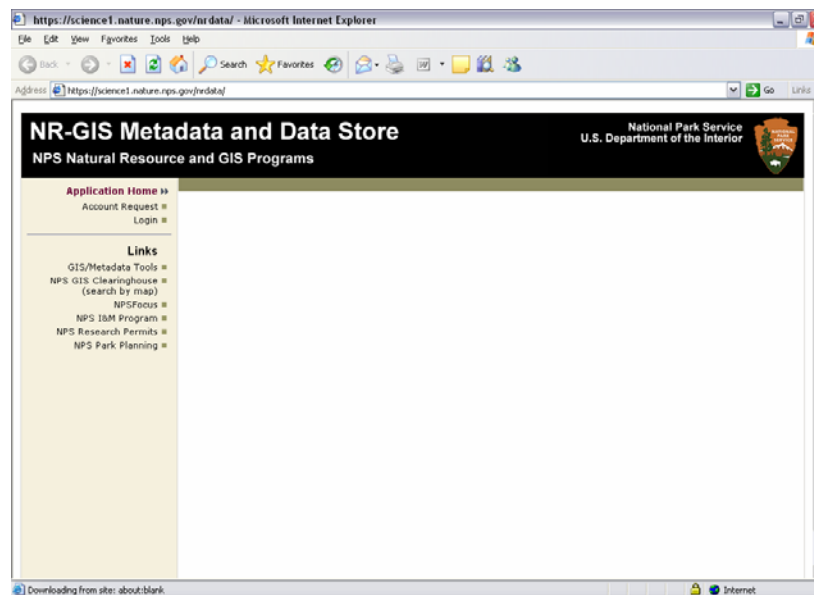
The following materials are needed to complete this exercise.

1. Internet Connection and internet browser application such as Internet Explorer, or Netscape Navigator.
2. FGDC compliant metadata record in XML format, and optionally its associated data and browse graphic.
3. Universal Web Login Account with Author or Editor access to the Data Store and Data Server.
<https://science.nature.nps.gov/login>

EXERCISE STEPS

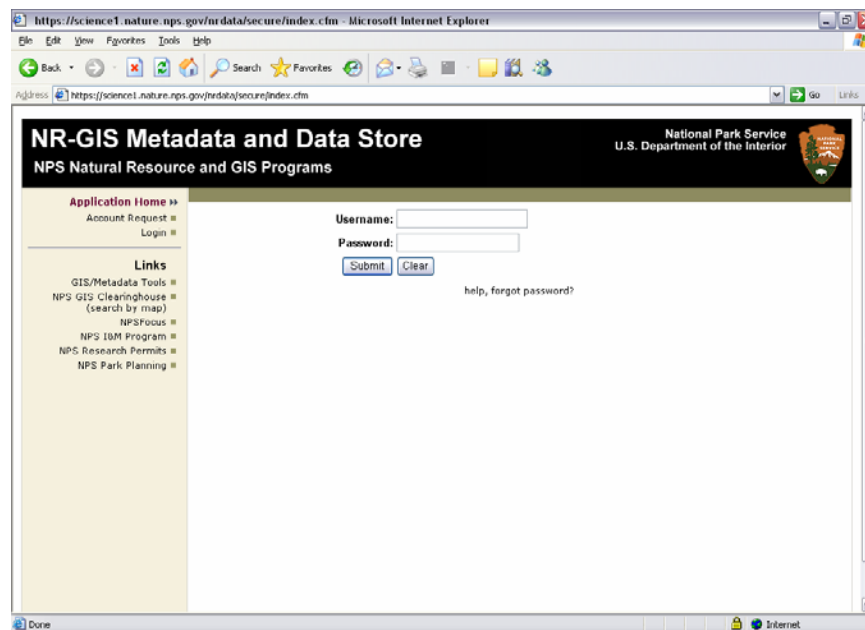
Step 1: Open an internet browser to the secure component of the Data Store

<https://science1.nature.nps.gov/nrdata>



Step 2: Login to the Data Store

Click the **Login** link in the left panel. Enter your username and password. If you do not have a username and password, click the **Account Request** link in the left panel to request one.



Step 3: Upload Data

This example will use a sample metadata record from Badlands NP that has an associated data file and browse graphic. Note: At this time only records suitable for public consumption are accepted for upload. See Data Store Metadata and Data Uploading Guidance document for further information at <http://science.nature.nps.gov/nrddata/docs/metahelp/NR-GISMetadataDataUploadGuidance.pdf>

In the left panel, under the **Operations** heading, click **Upload Metadata & Data**. Using the **Browse** buttons, navigate to the location of your metadata record, in XML format. If applicable to the metadata record, navigate to the locations of the data file(s) and browse graphic.

Click Next.

Step 4: Complete the information required to upload the record

The following information is required for each record upon upload. Some elements are not part of the FGDC Metadata Standard, but are provided for in the NPS Profile. The NPS Profile is an extension to the FGDC Standard that allows for storage of NPS specific elements, like Park Code and Theme Categories. For more information and a complete description of the NPS Profile visit the Data Store Help section, also accessible at <http://science.nature.nps.gov/nrddata/docs/npsprofile.cfm>.

- **Data Server Target Location**

Choose the location on the Data Server where the metadata and associated files will be available. The list will contain only folders to which you have write access. If you wish to create a new sub folder or access an existing one you may type it in the **New Folder** text box to the right of the picklist.

For this exercise create a folder called TRAINING in the folder you are uploading metadata to.

Data Server Target Location

Data Server Folder Please enter the data server location to store the xml and data files

\\ and/or New Folder: BADL\TRAINING

- **NPS Unit Information**

Select from the list the unit that your data relates to. You may select more than one unit if applicable. This information is searchable, so entering the correct information is critical.

NPS Profile Required Elements (populates the NPS_Info section of the metadata record)

NPS Unit Information: Use CTRL to select multiple units - Please select a unit even if unit information is in place keywords

Aztec Ruins NM (AZRU)
Badlands NP (BADL)
Baltimore-Washington NPKWY (BAWA)
Bandelier NM (BAND)

- **NPS Profile Metadata Purpose**

The Metadata Purpose identifies how the metadata should be searched and displayed. For the purpose of this exercise, select NPS, OnlineData and CSDGM. All records uploaded to the Data Store have the NPS Profile elements added, so NPS is a required purpose. NPS is added by default if you forget to select it. If data are uploaded also select OnlineData. Select CSDGM if the metadata conform to FGDC standards. This information controls how the metadata is displayed, so entering the correct information is critical.

NPS Profile Metadata Purpose: Use CTRL to select multiple options

NPS	<input type="checkbox"/>
OnlineData	<input type="checkbox"/>
CSDGM	<input type="checkbox"/>
DataCat	<input type="checkbox"/>

- **NPS Theme Category Information, ISO 19115 Topic Category Information**

The NPS Theme Category and ISO 19115 Topic Category should be populated with the value or values that are appropriate to the data. The NPS Theme Category is required for searching in the Data Store. The ISO 19115 Topic Category is required for searching in NPS Focus, the NPS Clearinghouse.

NPS Theme Category Information: Use CTRL to select multiple categories - Please select a theme category even if category information is in theme keywords

Aspect by Quad	<input type="checkbox"/>
Biology	<input type="checkbox"/>
Boundary	<input type="checkbox"/>
Boundary by Quad	<input type="checkbox"/>

ISO 19115 Topic Category Information: Use CTRL to select multiple categories

Biota (flora or fauna in natural environment)	<input type="checkbox"/>
Boundaries (legal land descriptions)	<input type="checkbox"/>
Climatology / Meteorology / Atmosphere (processes and phenomena of the atmosphere)	<input type="checkbox"/>
Economy (economic activities, conditions and employment)	<input type="checkbox"/>

- **Data Store Information: Data Site and Data Steward**

This information is required only when OnlineData is selected as a Metadata Purpose value. The Data Site denotes the physical location of the downloadable data. Data that are uploaded to the Data Store should have NR-GIS as the data site. Data may also reside on another server, either NPS-owned or partner-owned. If this is the case select from the available options as appropriate.

The Data Steward is the person responsible for the metadata and data that are uploaded. The Data Steward will be contacted by Data Store administrators in the event that an issue arises with the metadata or data. This must be a person's name and contact information, not a position title or group email account (i.e. GIS Specialist).

Data Store Information

Data Site Please enter the data site (NR-GIS, AKSO, USGS, free text)

NR-GIS	<input type="checkbox"/>
AKSO	<input type="checkbox"/>
USGS	<input type="checkbox"/>

Data Steward Please enter the data steward contact information (**required fields)

Contact Name** Jane Doe

Organization

Position

Telephone** 970-555-1234

E-mail Jane_Doe@nps.gov

Address Type** mailing

Address

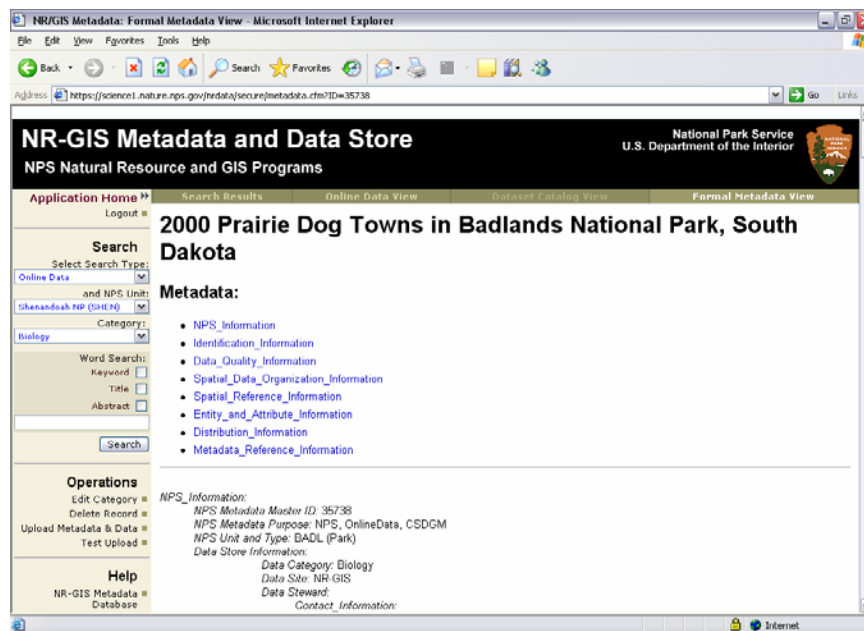
City** Fort Collins

State** CO

Postal Code** 80525

Country

Click **Upload** once all information has been entered. If the upload was successful the record will be displayed for your review.



Step 5: Review the Modifications Made to the Uploaded Record

The upload process will modify specific elements in three sections of the Metadata. The NPS Profile information will be added into a section called NPS Information (NPS_Info). Carefully examine each section to verify its accuracy.

1. Examine the NPS Information section to verify the accuracy of:
 - a. NPS Metadata Purpose
 - b. NPS Unit and Type – BADL (Park)
 - c. Data Category and Data Site
 - d. Data Steward Contact Information

NPS_Information:
NPS_Metadata_Master_ID:
 35738
NPS_Metadata_Purpose:
 NPS, OnlineData, CSDGM
NPS_Unit_and_Type:
 BADL (Park)
Data_Store_Information:
Data_Category:
 Biology
Data_Site:
 NR-GIS
Data_Steward:
Contact_Information:
Contact_Person_Primary:
Contact_Person: Jane Doe
Contact_Organization:
Contact_Position:
Contact_Address:
Address_Type: mailing
Address:
 City: Fort Collins
 State_or_Province: CO
 Postal_Code: 80525
 Country:
Contact_Voice_Telephone: 970-555-1234
Contact_Electronic_Mail_Address: Jane_Doe@nps.gov

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2. Examine the Identification Information section to verify the accuracy of:

- a. Keywords: Look for the Theme Category and ISO 19115 Topic Category keyword values, NPS Unit Name and Unit Code values

North_Bounding_Coordinate:43.927073
 South_Bounding_Coordinate:43.467184
 Keywords:
 Theme:
 Theme_Keyword_Thesaurus:None
 Theme_Keyword:prairie dog towns
 Theme:
 Theme_Keyword_Thesaurus:National Park Service Theme Category Thesaurus
 Theme_Keyword:Biology
 Theme:
 Theme_Keyword_Thesaurus:ISO 19115 Topic Category
 Theme_Keyword:Biota
 Place:
 Place_Keyword_Thesaurus:None
 Place_Keyword:Badlands National Park
 Place_Keyword:BADL
 Place_Keyword:Jackson County
 Place_Keyword:Pennington County
 Place_Keyword:Shannon County
 Place_Keyword:Interior
 Place_Keyword:South Dakota
 Place_Keyword:United States
 Place_Keyword:North America
 Place_Keyword:National Park Service
 Place_Keyword:NPS
 Place:
 Place_Keyword_Thesaurus:National Park System Unit Code Thesaurus
 Place_Keyword:BADL
 Place:
 Place_Keyword_Thesaurus:National Park System Unit Name Thesaurus
 Place_Keyword:Badlands National Park
 Access_Constraints:NONE
 Use_Constraints:
 The National Park Service shall not be held liable for improper or incorrect use of the data described and/or contained herein. These data

- b. Browse Graphic and Metadata Cross Reference:
 Browse Graphic link should be formatted with **http://nrdata.nps.gov/** followed by the folder structure specified on upload, and the filename of the browse graphic.

Cross Reference Citation should contain the Originator, Title, and Publication Date from the Dataset Citation, and an Online Linkage to the metadata file formatted with **http://nrdata.nps.gov/** followed by the folder structure specified on upload, and the filename of the metadata file.

Contact_Facsimile_Telephone:605-433-5404
 Contact_Electronic_Mail_Address:Doug_Albertson@nps.gov
 Browse_Graphic:
 Browse_Graphic_File_Name:<http://nrdata.nps.gov/badl/temp/2000pdogs.jpg>
 Browse_Graphic_File_Description:
 Browse_Graphic_File_Type:
 Native_Data_Set_Environment:
 Microsoft Windows 2000 Version 5.1 (Build 2600) Service Pack 1; ESRI ArcCatalog 8.3.0.800
 Cross_Reference:
 Citation_Information:
 Originator:National Park Service, Badlands National Park, Resource Management Division
 Publication_Date:20030716
 Title:
 Metadata for 2000 Prairie Dog Towns in Badlands National Park, South Dakota
 Online_Linkage:<http://nrdata.nps.gov/badl/temp/2000pdogs.shp.xml>
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3. Examine the Distribution Information section (if data are uploaded) to verify the accuracy of:
 - a. Network Resource Name: Link to the downloadable data, should be formatted with **http://nrdata.nps.gov/** followed by the folder structure specified on upload, and the filename of the data file.

to individual use of the data and aggregate use with other data.

Standard_Order_Process:

Digital_Form:

Digital_Transfer_Information:

Format_Name:SHP

Format_Version_Number:ArcView 3.2

Format_Specification:

Shapefile, zipped

Format_Information_Content:

prairie dog towns

Transfer_Size:1.604

Digital_Transfer_Option:

Online_Option:

Computer_Contact_Information:

Network_Address:

Network_Resource_Name:<http://www.nps.gov/gis>

Digital_Form:

Digital_Transfer_Option:

Online_Option:

Computer_Contact_Information:

Network_Address:

Network_Resource_Name:<http://nrddata.nps.gov/badl/temp/2000pdogs.zip>

Fees:None

Technical_Prerequisites:

GIS software that can read shapefiles

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Step 6: Search for the Uploaded Record

Using the search interface in the left panel of the Data Store, search for the uploaded record.

Try searching OnlineData and Formal Metadata separately. Try searching with only the unit code, or category. Does the record appear as you expected?

Step 7: Download the Record

To maintain the most current version of the metadata record in your office, it is important to download the metadata record after it has been uploaded. Many elements have been changed or added during the upload process. One critical addition is a unique record identification number called the Master Metadata ID. The presence of this number in the metadata record will prevent the same record from being uploaded again, preventing orphaned data, overwritten metadata, and duplicate records.

After the record has been found in the previous step, find the link to the metadata file (*.xml) in the record, right click on the link and select **Save Target As** from the context menu.

The link to the metadata file can be found in the the Metadata File link in the Online Data View,

Search Results	Online Data View	Dataset Catalog View	Formal Metadata View
<p>— Online Data Information</p> <p>Dataset Title: 2000 Prairie Dog Towns in Badlands National Park, South Dakota</p> <p>Data File: http://nrddata.nps.gov/badl/badldata/2000pdogs.zip</p> <p>Preview: http://nrddata.nps.gov/badl/badldata/2000pdogs.jpg</p> <p>Metadata: http://nrddata.nps.gov/badl/badldata/2000pdogs.xml</p> <p>More Info: None</p>			
		Format: SHP	Data Size: 1.604

or in the Cross Reference citation in the Identification Information section of the Formal Metadata View

Cross_Reference:

Citation_Information:

*Originator:*National Park Service, Badlands National Park, Resource Management Division

*Publication_Date:*20030716

Title:

Metadata for 2000 Prairie Dog Towns in Badlands National Park, South Dakota

Online_Linkage:<http://nrddata.nps.gov/badl/temp/2000pdogs.shp.xml>

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Keep an archive copy of the original metadata record used for upload. Use the new record downloaded from the Data Store as your working copy.

CONCLUSION

This exercise reviews the upload process for FGDC compliant metadata records that may exist at your park. The process of answering the questions in step 4 can be time consuming, especially if many records need to be uploaded. Optionally, records can be formatted before uploading with the required information to eliminate extra steps during upload. See the Data Store Metadata Authoring Guidance document for the specific requirements at <http://science.nature.nps.gov/nrddata/docs/metahelp/NR-GISMetadataAuthoringGuidance.pdf> or the Data Store Creating Metadata step-by-step guidance at <http://science.nature.nps.gov/nrddata/docs/metahelp/NR-GISCreatingMetadata.pdf>.

REFERENCES

National Park Service Metadata Profile. <http://science.nature.nps.gov/nrddata/docs/npsprofile.cfm>.

SOFTWARE REFERENCES

NR-GIS Metadata Database and Data Store. <http://science.nature.nps.gov/nrddata>,
<https://science1.nature.nps.gov/nrddata>.